

AMERICAN BEE JOURNAL



GEORGE W. YORK,
Editor.

CHICAGO, ILL., OCTOBER 3, 1901

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WEEKLY



APIARY OF LESLIE E. HAZEN.—(See page 628.)

THE AMERICAN BEE JOURNAL

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PROF. A. J. COOK, }

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To prevent the adulteration of honey.
 To prosecute dishonest honey-dealers.

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ESTABLISHED IN 1861 AMERICAN THE OLDEST BEE-PAPER IN AMERICA BEE JOURNAL

41st YEAR.

CHICAGO, ILL., OCTOBER 3, 1901.

No. 40.

* Editorial. *

A Bee-Keepers' Paradise is what Editor Root calls Uvalde Co., Tex., with some other counties in that State and New Mexico. But after having raised the expectations of prospecting bee-keepers to the highest notch, he lets them drop with a dull thud by saying that Uvalde county is "fearfully overstocked."

The Buffalo Convention Report we expect to begin publishing soon. There were no papers read except at the joint meeting of the pomologists and bee-keepers on the last evening. So, practically, the whole of the report will be discussions of questions. This should make it very interesting reading.

Hive-Covers.—Saw-kerfs on the underside of hive-covers have been successfully used to prevent warping, but Editor Root says that after a thorough trial of such covers they have been abandoned, because in dry climates these saw-cuts favor checking and splitting entirely too much. Even in northern Ohio they give a good deal of trouble.

Need of Laws on Bee-Diseases.—On page 631, Hon. J. M. Hambaugh, bee-inspector for San Diego Co., Calif., offers some highly important suggestions that should have earnest consideration.

The careful, up-to-date bee-keeper deserves to be fully protected from his careless, slipshod neighbors whose bees are more likely to contract deadly disease, and when once contracted is harbored and permitted to contaminate surrounding healthy apiaries. Surely, there should be stringent laws in every State to compel every bee-keeper to aid in the discovery of bee-diseases, and when found aid in its complete eradication. This is as much in the interest of infected apiaries as healthy ones.

Mr. Hambaugh also calls attention to the necessity of issuing a certificate from a lawfully appointed inspector, showing the healthy condition of every colony proposed to be removed from one locality to another. This certainly would be a wise provision. It would help in many instances, no doubt, to prevent carrying contagion from place to place.

Mr. J. M. Rankin, Michigan's alert inspector, has just had an experience in the direction indicated. He examined a lot of hives, combs, etc., belonging to a bee-keeper at

Evart, Mich., and finding ample evidences of foul brood, he officially ordered the bee-keeper to destroy the disease-infected combs, etc. Instead of obeying the officer of the law, he loaded the stuff on a car and shipped it to Clyde, Ill., near Chicago, where it will likely become a menace to the healthy apiaries in that locality.

Now, if Illinois had a good foul brood law, and an efficient inspector, this case would be followed up, and finally be gotten rid of.

But what kind of a bee-keeper is the man that would ship bee-disease from one State into another, instead of destroying it, especially when ordered to do so by one whose duty and authority it is to clean up such disease before it is spread any further? The offending bee-keeper deserves the severest condemnation possible by his fellows, and also the complete destruction of his whole apiary if even the slightest trace of foul brood is found therein. Any man who would so wantonly convey disease from place to place, rather than obey a wholesome law, should be held up to the scorn of all good bee-keepers and citizens, and be made to feel to the fullest extent possible the result of such wilful disobedience.

We hope that there may be sufficient agitation to secure the much-needed laws in all the States for the protection of bees from contagious diseases. In view of the good work already done by the few State, county and province inspectors of apiaries, it would seem that every State would be able to secure at least one inspector by the passage of a suitable law.

The Hive-Tool that suits best at Medina is a putty-knife, says the editor of *Gleanings in Bee-Culture*, while Dr. Miller says the Muench tool is away ahead of any other tool he has ever tried. Its broad semi-circular blade is easily wedged in under cover or super without marring the wood, and the other end is so constructed that a slight twist forces the frames apart with the exertion of very little strength.

Red Clover Honey.—A conversation is reported in *Gleanings in Bee-Culture* which is supposedly based on fact, from which it appears that a neighbor of G. M. Doolittle's, living two miles distant, finds red clover perfecting its bloom for the first time in 15 or 20 years, and his black bees are not to be seen on it at all, while Mr. Doolittle's yellow bees are just swarming on it. From some colonies Mr. Doolittle took as high as 80 one-pound sections of red-clover honey, while the average yield was not far from 65 sections. The linden came, and made the total average from colonies not interfered with by queen-rearing

about 145 sections, the highest average he has had except in 1877. It would be just like him to say that he now places a higher value on long tongues than he did.

A Special Encouragement in Queen-Rearing lies close neighbor to the discouraging fact that we have little or no control of the drones. In order to stimulate to greater effort, it may be well to bring out with some minuteness wherein this encouragement lies. While it is true that drones from neighboring apiaries may meet our young queens, yet where one has a hundred colonies or more, especially if neighboring bees be few, the predominance in numbers of the drones in the home apiary makes the chance fair for some degree of safety from outside interference.

Let us suppose that we are so situated that outside interference of drones need not be taken into account. Suppose, too, that after close watch and careful record we have found one queen whose workers show marked superiority as honey-gatherers. All the better if the queen be of such age that such superiority has been shown in two or more years. The parents of this queen have had characteristics that made such a combination as to result in an offspring superior to either of the parents. Let us call the drone father of our present queen D1, the queen mother Q1, and designate their drone and queen offspring respectively as D2 and Q2. From our superior queen, Q2, will be reared the present season drones and queens that we will call D3 and Q3, and it will not be a difficult matter before the close of the season to have a Q3 queen in every colony in the apiary. Next season will then open with an apiary headed by Q3 queens, whose workers will be from fathers that vary from each other, hence the workers will be of varying value, none of them perhaps coming up to the mark of the workers of Q2, but taking the apiary as a whole there will be a noticeable improvement.

Now as to the rearing of queens next season. If our superior queen, Q2, is still living, and we are willing to take the risks of inbreeding, we may rear queens from her, or we may obtain a good queen of unrelated blood from elsewhere. In either case, the drones that meet our young queens will be the same, the sons of the Q3 queens, and may properly be called D4. Right in the character of these D4 drones lies our special encouragement. As parthenogenesis prevails among bees, these drones will not be of the same blood as the queen and worker progeny of their mother, but will be of the same blood as the Q3 queens themselves, and consequently of the same blood as the worker progeny of our superior queen Q2. Whatever superiority may have

been shown in the worker progeny of that queen, we have that same superiority in the drones with which the entire apiary is now stocked. Some claim that it is more important to have good drones than good queens, and no one denies that the drone is fully as important as the queen. So whatever the quality of the queens reared next year, we are sure of drones of best quality.

As already intimated, all this must be discounted by the chance of inferior drones from outside, but after making that discount there is still food for much encouragement in the thought that only superior drones are in our own yard.

The Best Fumigator.—A Stray Straw in Gleanings in Bee-Culture says:

If it is true that bisulphide of carbon will kill moth-eggs as well as larvae, why is it not a long way ahead of sulphur for those who fumigate their sections? Bisulphide can be used once for all when sections are taken off, or within two weeks, and save the repetition of the fumigation that sulphur requires, also saving the danger of making the sections green with sulphur.—[If the reports are true, the man who persists in using sulphur in place of bisulphide of carbon is far behind the times. The bisulphide is more thorough, and much less trouble to use. While it is subject to more or less danger from explosion, the burning of sulphur, even in an iron kettle, also has its danger.—EDITOR.]

But even bisulphide of carbon may have to give way to gasoline, according to J. B. Rapp, who says in the same periodical:

I have just made an important discovery, to me at least; that is, that gasoline is as effective in killing moth-worms in bee-combs as bisulphide of carbon, and it does not cost a twelfth as much. My plan is to fill a tight box or barrel with combs, then pour in a pint or so of gasoline; close up tight for 24 or 36 hours, and the work is done. Gasoline beats sulphur far away, and is much easier used, and safer. I have used gasoline on hundreds of Langstroth combs, and have no trouble with worms, as I think the gasoline kills the eggs as well as the worms.

The editor adds that he knows gasoline can be used in place of the more expensive drug to destroy ant-nests, but it takes a larger quantity.

The Production of Beeswax.—Harry Howe thinks there may be profit in producing wax instead of honey in Cuba. He says in *Gleanings in Bee-Culture* that in the olden time many apiaries were run entirely for wax, the honey being thrown away. At present wax brings 9½ times as much as honey in Cuba, and the conditions are peculiarly favorable there for the production of wax, the honey-flow being eight months long, with hot enough nights during half that time for secreting wax without waste of heat. He says:

My plan is to cut out the combs instead of extracting them, and return the frames, but only half from each hive, extracting the other half so they will at all times have store-room. Then, when there is no longer a surplus to be had in the fields, contract the brood-nest and set out honey at one side of the apiary. As fast as they carry in the honey, melt the wax which remains; then when they have built their combs nearly down, set them out to be emptied and melted.

I think the improved condition of my bees in the beginning of the next harvest will about pay for the extra labor; but until it has been tried, no one knows how it will work.

Weekly Budget.

MR. JOHN C. WILMS, of Riverside Co., Calif., wrote us Sept. 18, that he had taken off 26,850 pounds of extracted honey from 115 colonies, spring count. Pretty good average per colony.

THE APIARY OF LESLIE E. HAZEN, of Nemaha Co., Kans., is found on the first page of this issue. The photograph was taken from the northeast, so the rows of hives running north and south in the apiary can not be seen. We should think, however, that it is a very neat apiary.

MR. HARRY HOWE, the "lightning operator," has had some sympathy wasted on him by the report that he was hopelessly broken in health. It appears that the news of his ill-health was a year old or more, and his friends will be glad to learn that he is now as well as ever, and caring for about 1000 colonies of bees in Cuba. The report and the correction have both come through *Gleanings in Bee-Culture*.

MR. WM. ROHRIG, of Maricopa Co., Ariz., gave this office a call on Monday, Sept. 23. He had been in the East—New York, Buffalo, etc.—looking up the honey interests. He is vice-president of the Arizona Honey-Producers' Association, which has quite a number of car-loads of extracted honey for sale, but they think the prices offered so far are too ruinously low. Mr. Rohrig has about 900 colonies, in three apiaries. The principal source of honey there is alfalfa, which in that locality seems to yield a light amber honey, while in Colorado and Utah alfalfa honey is very white. This great difference in color seems quite unaccountable.

QUOTING THE HONEY MARKET.—Messrs. Blake, Scott & Lee, of Boston, write us as follows in response to Mr. Cooley's letter on page 363:

AMERICAN BEE JOURNAL:—We note with interest the letter of Mr. Stoughton Cooley in the issue of Sept. 5, and as we have had the honor of quoting in the *American Bee Journal* for several years past, a word from us might not be amiss at this time.

Our method has been invariably to quote from actual sales. During the summer months—in fact, we might say from May 1 to Sept. 1—the demand for honey is so limited that quotations are practically nominal, and although we received quotation cards regularly, yet during this interim we very frequently simply state that "the market is without change."

Now, the question would seem to arise, Which is the more reliable, quotations given by the commission men from actual sales, or quotations from a trade paper? When it is known that the trade papers in the various centers must depend upon the commission men themselves for quotations, it will be seen at a glance that both the quotations the *American Bee Journal* receives, and those of the trade papers, are primarily from the same source, and in that event the former would naturally be the latest and most up to date. From our experience with quotations of other commodities, we know that the quotations in the *American Bee Journal* are more

apt to be reliable for this reason—you are quoting one specialty! In the trade journal, honey is but one of a great many, and for this reason will not demand the searching inquiries that the *American Bee Journal* is in a position to give.

By referring to the instance mentioned in Mr. Cooley's letter, it will be seen that it comes during the inactive period of the year; while if reference is made to the issue of Sept. 5, it will be found that the oldest quotation is Aug. 6, and from that on to Aug. 22, during which time we venture to assert that there could be no essential change in any market.

We might mention that in our business we have had occasion from time to time to write to different markets when for any reason our market happened to be short of supply, and we have invariably found that we were unable to buy at a lower price than prices quoted; thus proving the correctness of the quotations, and certifying to the value of the *American Bee Journal* to our shippers.

Wishing you continued success, we remain,
Yours respectfully,
BLAKE, SCOTT & LEE.

We should be pleased to hear from the rest of those who quote the honey and beeswax market for the *American Bee Journal*. We want to get at the bottom of this matter, and if there is a better way to get at actual market values we desire to know it, and avail ourselves of it. What have the rest of the dealers to say?

APIARY OF J. W. TUCKER & SON.—The picture on page 634 was taken from the roof of the barn. The aged lady to the right is Mr. Tucker's mother, and next are his wife and daughter Grace. The young man on the left is his son, and the people in the background are his next-door neighbors. The little boys came in at the eleventh hour, but one can see them by looking closely.

It will be noticed that quite a few of his hive-covers are flat, and he says they are made in this way: The two gable ends proper are made out of ¾x1¼ inch wood rabbeted out ¼ of an inch deep on the lower edge for the under lid to lie in, leaving ¼ inch to hook over the end of the hive. The center gable is one inch. The top lid projects one inch all the way around, and the tin is turned down over it. There are several layers of thin paper ¾ of an inch under the tin. The one-inch air-space and the paper make the cover all right, and it doesn't cost much more than the other kind.

MR. JOHN G. COREY, of Ventura Co., Calif., wrote us as follows, Sept. 10:

I had no honey in 1898, 1899 and 1900, but this year I built up my bees to my original 200 colonies, and have taken 16,500 pounds of honey. My stock had run down to 135 colonies.

I am one of the old bee-keepers, having been in the business since 1860. My father kept bees in gums; he got his start from beehives. We lived in Rock Grove, in Stephenson Co., Ill., 15 miles north of Freeport, settling there in 1836. We hauled wheat to Chicago, 110 miles, and sold it for 40 cents per bushel; camped out, and hauled oats to feed our horses for the round trip which took seven to eight days.

MR. EDWIN BEVINS, of Des Moines Co., Iowa, called at this office recently while on his way to Wisconsin for relief from a severe attack of hay-fever. We wish him complete relief from that terrible affliction.

Convention Proceedings.

(Continued from page 616.)

Report of the Texas Bee-Keepers' Convention.

BY LOUIS SCHOLL, SEC.

FIRST DAY—AFTERNOON SESSION.

The convention was again called to order by Pres. Salyer, at 2:00 p.m., and the first business was the report of the committee on constitution and by-laws. Secretary Scholl read the following, which was unanimously adopted.

CONSTITUTION.

ARTICLE I.—NAME.

This organization shall be known as "The Texas Bee-Keepers' Association."

ARTICLE II.—OBJECTS.

Its objects shall be to promote the interests of bee-keepers; the exchange of thoughts, experiments, etc., in apiculture, through the meetings of this Association; and through a closer relation of its members.

ARTICLE III.—MEMBERSHIP.

SEC. 1. Any white person who is in accord with the objects and the aims of this Association, may become a member upon the payment of \$1.00 to the Secretary-Treasurer, payment to be made at or before each annual meeting of the Association; or not later than 10 days thereafter. Membership will continue as long as all dues are paid up.

SEC. 2. Any person may become an honorary member of this Association upon a two-thirds vote of the members present.

ARTICLE IV.—OFFICERS.

SEC. 1. The officers of this Association shall be a President, a Vice-President, and a Secretary who shall be ex-officio Treasurer.

SEC. 2. The officers shall all be elected annually by ballots of the members of this Association at their annual meeting.

ARTICLE V.—DUTIES OF OFFICERS.

SEC. 1. *President.*—It shall be the duty of the President to preside at the annual meetings of this Association, and to perform such other duties as may devolve on the presiding officer. The President shall be ex-officio Vice-President of the "Texas Farmers' Congress."

SEC. 2. *Vice-President.*—In the absence of the President, the Vice-President shall perform the duties of President.

SEC. 3. *Secretary.*—It shall be the duty of the Secretary to keep the records of this Association; to make a report of the annual meetings; to receive membership fees; to make a report at the annual meetings; and perform such other service as the Association may direct.

SEC. 4. The President, Vice-President and Secretary shall form an Executive Committee. Their duties shall be such as usually fall to such officers.

ARTICLE VI.—FUNDS.

SEC. 1. The Secretary shall remit to the General Manager of the National Bee-Keepers' Association, within two weeks after the annual meeting, the sum of 50 cents for each paid-up member, as a membership in the National Bee-Keepers' Association for one year.

SEC. 2. The Secretary shall receive not less than \$10.00 annually for his services, and shall receive another sum equal to his legitimate expenses for the benefit of this Association.

SEC. 3. The remaining funds of this Association shall be expended as the members thereof may direct.

ARTICLE VII.—MEETINGS.

This Association shall hold annual meetings at such time and place as the members may select by a two-thirds vote at some regular meeting; but if in any event it becomes impracticable to meet at the place selected, because of unforeseen events, then this Association shall hold its meeting at such time and place as the Executive Committee may select.

ARTICLE VIII.—COMMITTEES.

The President of this Association shall appoint, yearly, the follow-

ing committees: Resolutions and Petitions; a Program Committee of one; and such other committees as may become necessary.

ARTICLE IX.—GENERAL.

SEC. 1. This Association shall ally itself with the Texas Farmers' Congress in every way possible, provided that such alliance is never detrimental to this Association.

SEC. 2. It shall be one of the aims of this Association to secure the passage of a law establishing an "Experimental Apiary" at College Station, together with the appointment by the Governor of an experimenter, who shall be recommended to him by the Texas Bee-Keepers' Association.

ARTICLE X.—AMENDMENTS.

This Constitution may be amended by a two-thirds vote of the members present at some regular meeting.

The new association now bears the name of "Texas Bee-Keepers' Association," leaving the "North Texas" and "South Texas" associations as "local" bee-keepers' associations. Every Texas bee-keeper ought to be a member of the Texas Bee-Keepers' Association now, as with its new constitution and a new set of officers a great deal of good work can be done if the bee-keepers will only lend that which these men have asked for—the help, assistance and co-operation of the bee-keepers, and with that the Association could make strides forward as never before; only we must have their help. Every bee-keeper in our great State ought to take pride in helping to build up a State association that will surpass all others, and this can only be done if they will give their assistance. Put your shoulders to the wheel, that is, your dollars into the treasury, paid for your annual membership, and help to keep it going. The greater the association, the more members it has, the more can be done.

Now something about what you get if you want to be a member:

By paying your annual dues of \$1.00, you are not only a member of the Texas Bee-Keepers' Association, but 50 cents of this one dollar is sent with all of the other members, to the general manager of the National Bee-Keepers' Association, securing membership with that organization also. Thus one is a member of his State association, and at the same time can enjoy all the benefits of the National Association at just half the regular rate. Of course, it will be well to bear in mind that to do this, members must act according to Article III of the Constitution of this Association, in regard to membership and membership fees.

Besides all this, a reduction has been secured in the subscription prices of our bee-papers, when pay for them is given to the Secretary of this Association along with their annual membership dues.

The Secretary was instructed to write to each member, of the change that has taken place; of the new name of the association; of its new constitution; its new business, objects and intentions; and to notify them of their annual dues of one dollar.

After this the general subjects on the program were again resumed, namely: "Manipulating Bees for a Large Yield of Extracted Honey," by O. P. Hyde, who said the main objects were, to have good, prolific young queens; large hives, not less than ten frames, then tier up as soon as room is needed, three or four stories high, and as soon as filled and well capped over take out the honey. He also touched on the minor points connected with producing large amounts of extracted honey; the above being the main objects.

W. O. Victor read an article he contributed to the Review, which, however, is too lengthy to copy, and the issue is not before me to make a summary.

FORCING QUEENS TO LAY IN CELL-CUPS.

"How Can Queens be Forced to Lay in Queen-Cell Cups?" was answered in a paper by H. H. Hyde. He does not claim to be responsible for being assigned that subject, and hopes nobody will be disappointed if he fails to give satisfactory solution of the question. He has not much experience to prove or disprove this query, but cited a case where he put cell-cups in top-stories of good colonies before grafting, to have them polished by the bees, when he distinctly remembers where in one case the queen laid an egg in such a cell, which was built out and hatched a queen. He said further that by placing cell-cups conveniently in a hive of bees that wish to supersede their queen, such queens could be forced to lay in them. Also at swarm-

ing time, queens can be forced to lay in such cell-cups conveniently placed in the hive; at other times it would not seem practical, and hard to be accomplished.

Mr. Stachelhausen thinks that it can only be done during swarming-time.

Mr. Atchley told how it could possibly be done, by placing cell-cups around and near drone-brood, conveniently, and where queens are mostly found after their regular season's laying has been at its fullest, when the queens are almost worn out from the hard work of depositing worker-eggs. It is then that they are almost crazy to resort to depositing drone-eggs, as it seems to be easier for them to do this than that of laying worker-eggs. This of course, like the other cases cited, will be at about swarming-time.

IMPORTANCE OF GOOD QUEENS.

A paper from Willie Atchley on this subject was read, in which he said that too much could not be said about queens. Good queens, good bee-keepers, and good localities make bee-keeping a success; and either of these essentials lacking, bee-keeping is a failure. It is highly essential that all apiarists look sharp to the prolificness of their queens, and the working qualities of their bees. Give him good queens, and a good location, and he will turn out a crop of honey.

Mr. Weaver and others gave some of their experience about good queens, a good locality, good queens, and good management, being a sure road to success. Some told about the difference in queens, some being large and fine looking, but almost worthless in other qualities, while some of the very smallest, sometimes called "stub" queens, have done wonders. This, however, is not a rule.

REARING GOOD QUEENS.

This was by Mr. G. F. Davidson, who gave his *modus operandi*, which were given at previous meetings of the Central Texas Bee-Keepers' Association.

He recommends the Alley plan he has so long practiced, and with which he has been successful.

H. H. Hyde spoke in favor of the Doolittle plan and method, and although the *best* queens can be reared by the Alley plan, with the Doolittle method good queens, and more of them, can be obtained.

MOVING BEES.

O. P. Hyde had much and varied experience in moving bees, as he moves bees nearly all the time. He has also had some *fun* connected therewith, on which account he began to study to find out the best way to move bees, and has been quite successful. To close the entrances, he uses a device (the idea of which he obtained from a bee-keeper who did not know anything about bees, only having a colony or two), with which he can close up the entrances of 10 hives to one closed in the ordinary way, by tacking wire-cloth over the entrances. It is simply a piece of tin about two inches wide, with a cleat or piece of board half as wide nailed on the upper edge, all as long as the hive is wide. The lower half of the tin is perforated to give ventilation. Now with two 3d. wire nails in the cleat, just tack on the entrances, and it is done.

Next, the cover is nailed down with two more nails, one on each side, into the side-walls of the hive. Two or more story hives are held together by means of strips of lath nailed to the sides of the hive, diagonally across the sides.

In hauling, one should have a wagon-bed wide enough so two hives can be set end to end across the bed, and other tiers the same way on top of these. For this purpose they have an "Electric" handy, low wheeled wagon, with a wide platform, having low side railings on the outer edges. If understood rightly, the back ends of the hives rest on these, leaving them slanting towards the middle from each side. The second tier, when put on top will then easily stay in place. In this way he has hauled bees for over 30 or 40 miles, and hardly a quart of bees were lost.

Mr. Davidson and others have used wire-cloth, but it is much trouble.

Mr. Atchley told about some of their experience, as they move bees extensively. They keep a large share of their bees on the migratory plan. Sometimes it happens to rain hard some distance from their bees, and the country around being a most wonderful one in regard to the quick growth of honey-yielding and other plants after a heavy rain, the flowers appear most abundantly in a very short time. It is then that they move whole apiaries from dry situations to the fields yielding nectar. For all this they are extra prepared with bee-wagons, and some 200 regular shipping-

cases with wire-cloth, provided with slotted cleats in which the frames are hung, with all the bees put in, closed up, and are then ready to haul on the special bee-wagons. The empty hives are hauled on any other wagon separate from the bees.

Mr. Victor makes large frames by ripping hive-bodies into rims, one inch square, on which wire-cloth is tacked. This is nailed over the top of the hives after the covers have been removed. He next sticks moss into the entrances, nails cleats, one on each side of the hive, and they are ready.

H. H. Hyde recommends cleats nailed on diagonally across and from opposite corners from the one on the other side. In winter or cold weather, wooden cleats to close the entrance are sufficient.

IMPORTANCE OF LARGE BREEDING-SPACE.

In a paper on this subject L. Stachelhausen said the secret of successful bee-keeping is to have the colonies at their fullest development just when the main honey-flow commences, for which purpose it is necessary to use different managements, whether the flow is early or late in the season. In most localities this honey-flow is so early that we have to do all we possibly can to develop the colonies at the right time.

His and other bee-keepers' experience has taught that in their localities they can get their colonies developed to the most possible strength before the main honey-flow, without any work at all, if they give them a large breeding-space and large comb-surface. This is the reason why Dandant recommends large frames and large brood-chambers. An experience of about 20 years has taught him that, in his climate at least, the division of the brood-nest into two or more shallow stories is no hindrance at all for the development of the brood; the queen will pass these "sticks" without any hesitation. On the other side the extension of the brood-nest to another comb, sideways of the brood-nest, is much more difficult. This is easily explained: The combs on both sides of the brood-nest generally contain a large quantity of pollen, and can not be used for brood before this pollen is consumed. To extend a brood-nest of this character sidewise, we are forced to remove these pollen-filled combs and replace them with empty ones; or to set empty combs into the middle of the brood-nest, as recommended by Mr. Doolittle. All this has to be done at the right time, not only corresponding to the strength of the colonies, but empty combs should be given just in the place where the queen is laying, because, even in this respect, the bees keep the brood-nest in wonderful order. For this reason the colonies have to be watched closely all during spring, causing a considerable amount of work, limiting the number of colonies a man could keep, especially if scattered in different apiaries.

If in large brood-chambers, with a large amount of comb-surface, all this work is unnecessary, because the development of the colony goes on without any work of ours, showing at once the advantage of such large brood-chambers. More colonies can be kept with the same amount of work; and even if the honey crop per colony should be smaller, which is doubtful, as by other management, the profit of the whole apiary will be larger. To get strong colonies in the spring, in such hives, it is necessary always to have enough honey in the hive, but not too much, with sufficient number of empty cells, or always enough more than the bees need at a given time.

Another advantage of large brood-chambers is that swarming is reduced to a minimum, especially so if the bees are kept in large hives during several generations. In this respect the condition of the honey-resources of certain localities are to be considered; in some localities swarming can be practically prevented by the use of large hives, while in other localities the number of swarms is reduced very much, and, to prevent these few swarms, other ways can easily be executed.

Nobody disputes these advantages of large brood-chambers in early spring, but some say that they have disadvantages during the main honey-flow. It would seem reasonable to ask, Why not use large brood-chambers in spring, as long as they are advantageous, and afterwards contract the brood-nest as soon as thought advisable? But this objection can not be overcome by this simple way.

1st. One objection is, when producing extracted honey, and using an unlimited breeding-space, during a very good honey-flow, the brood-nest will be contracted by the honey which the bees store around the brood. Contrary, in a moderate honey-flow, it is said, that the bees will use the large space to breed extensively, and will store very little honey, at the end of the flow leaving a strong colony of useless

consumers only. This objection is especially raised in Germany, where small hives are used.

If large hives are used all the year around, there will be strong colonies in the spring, which will develop much faster than weaker ones.

When the queen has reached the limit of her egg-laying capacity, which is a little more than 3,000 eggs daily, it will be impossible to extend the brood-nest any more; the queen will soon need a rest; the number of eggs laid daily is diminishing, and the now very strong colony will send out a very strong force of field-bees. Contrary, if we have a weak colony in the spring, in a brood-nest too small for proper development, the queen can not reach the limit of her egg-laying power; now the honey-flow commences, and we give the supers, it is only natural that the brood-nest is extended into these supers, and a large part of the flow is used to rear these worthless consumers, so much talked about. This undesired condition is caused by the small brood-chambers used in early spring. During the spring the queen could never lay all the eggs she would be able to lay, for lack of empty cells at the right place. Now, by giving a super with empty combs during a moderate flow, the queen is given the best occasion to extend her egg-laying to her fullest capacity. This will be prevented if the honey-flow is very good, and so fast that the bees fill the cells faster with honey than the queen can lay eggs in them, or if she is kept down in a limited space by a queen-excluder. By the latter manipulation a large or small amount of honey may be obtained, according to the strength of the colony; but development has been hindered in the spring, consequently the colony is not as strong as could be, besides the large amount of unnecessary labor expended.

2d. Of more importance is the objection, that large brood-chambers are in a bad condition for the production of section honey, when the main flow commences. When the section supers are put on, at the beginning of the main flow, the combs in the brood-chamber should contain as much brood as possible, and some bee-keepers want a brood-chamber of such a size that the queen can keep full of brood during the honey-flow. Hence they neglect the advantages of large brood-chambers during spring, and try to build up strong colonies in small chambers, by manipulating the frames, *a la* Doolittle, with some considerable work.

The problem is, how to use the advantages of large brood-nests in the spring, and the advantages of small brood-nests during the main honey-flow, both combined, without their disadvantages.

He solved this problem in a very simple way. It is well to know that no colony is better fitted for storing honey in sections than a strong swarm issuing just at the beginning of the main flow; especially if two or more swarms unite just at the right time, we may get from them a good crop of comb honey.

Gravenhorst taught, about 15 years ago, how to form such swarms at any time, and have them work with the same vigor as natural swarms. Consequently, it was easy for him to combine these two experiences and in this way to solve the problem.

Since publishing his way of producing comb honey, more have appeared who use ways similar to his.

The construction of the hive is of less importance, as we can use large brood-nests in different ways. Those who have 8 or 10 frame hives may take two stories for a brood-chamber, one on top of another. He uses shallow cases, and the bees have brood in three or four of these in the spring. Dadant prefers large combs in single stories; all these managements have advantages and disadvantages.

One thing is important, that the frames are wide enough; fortunately this question is settled for the United States, for the width of the Langstroth hive is the standard here, and large enough. Other things could be considered with the advantages of large brood-chambers.

(Concluded next week.)

Why Not Help a Little—both your neighbor bee-keepers and the old American Bee Journal—by sending to us the names and addresses of such as you may know do not now get this journal? We will be glad to send them sample copies, so that they may become acquainted with the paper, and subscribe for it, thus putting themselves in the line of success with bees. Perhaps you can get them to subscribe, send in their dollars, and secure for your trouble some of the premiums we are constantly offering as rewards for such effort.

Contributed Articles.

Bee-Diseases in California—Laws Needed.

BY HON. J. M. HAMBAUGH.

AL is not gold that glitters," but every cloud has its silver lining. This I have found quite applicable to our chosen pursuit of bee-keeping here in California, and among the many clouds that hang about the bee-keepers' horizon is that of bee-diseases.

Here, in this salubrious clime, where every month in the year, and almost every day in the year, bees can go forth in quest of pollen and nectar, opens opportunity for the spread of infectious diseases, and this, coupled with the wild waste of rocky cliffs, canyons, and wooded districts, furnishes hiding-places for bees, that can wreak and fester in diseases unmolested. It is hard for the wide-awake bee-keeper to overcome these dangers beyond his reach, but there is a danger of far greater magnitude right at his very door, that he needs to recognize, and which needs a cure, in the form of a little legislation.

Here is Mr. A, a practical bee-keeper, with all his combs throughout his entire apiary movable, and accessible at any time for inspection, and in appropriate condition to battle against any disease that may arise. Mr. B, his next door neighbor, is of the slipshod, go-as-you-please bee-keeping make-up, and allows his bees to build their combs at haphazard, half-moons, and all shapes that may suit their fancy, in their brood-chambers, and the consequence is, he is locking the door against all knowledge or treatment of any disease that is likely to turn up; he is also in shape to be (as it were) hugging an adder to receive its fatal sting, and also to dispense its venom among his neighbors. When there is such a deadly foe as foul brood abroad in the land, these inaccessible hives are a veritable death-trap, and, so far as inspectors are concerned, they are simply barren from investigation, save what the exterior may reveal.

In our route through the country these troubles are so manifest, and there is such a universal cry against their toleration, that it seems to me a very easy matter to have a law placed upon our statutes, compelling every one who keeps bees to have them upon movable combs, built in movable frames, and, by so doing, minimize the chances for contagious diseases, besides doing away with the old slipshod way of keeping bees. We believe that every wide-awake bee-keeper in the land should cry down the box-hive, stationary-comb evil, until every one who dares to keep bees would understand that to do so meant they must be upon movable combs, or the penalty of a fine incurred.

We also believe that a little further protection is needed to the bee-keeper, by statute enactment, and that is, when a bee-keeper contemplates moving from one location to another, he should have a certificate from a lawfully appointed inspector, the said certificate to be an assurance that each and every colony is free from all infectious or contagious disease, otherwise let it be a finable offense to remove them from their old location.

Now, Editor York, I have sounded the slogan of war, let us hear from you as well as others interested, and see which one of the sister States will be the first to start this good and much-needed reform. San Diego Co., Calif.



Robbing in the Apiary—Honey-Packages.

BY C. DAVENPORT.

I WOULD like to be allowed to say a few more words in regard to robbing. Last year I wrote an article in which I gave some of my experience in regard to bees robbing, and afterwards in some comments that were made about it, it was said, in effect, that the advice I gave on the subject was about like advising one to scatter live coals among dry straw. But this is a mistake, for I did not advise any one to practice my methods; in fact, I remember that I plainly said that I did not advise any one to follow my practice. I only gave my experience in regard to the matter; but what I wish to say is that, in my opinion, it

will some time be known, and generally recognized by bee-keepers, that a colony of bees of average strength (and, I feel tempted to say, quite weak colonies if in normal condition) are never, as the saying is, "cleaned out by robbers," or never molested by them enough to injure them materially in any way, no matter what has been done to induce robbing, or what the natural provocation to the same may be, except when they are first set out in the spring.

I have watched this matter very closely the last ten years, and, besides, from two different incidents I have witnessed, I know that a colony of average strength will, before succumbing to robbers, make such a fight as few would imagine them capable of doing. One of these incidents may be of enough interest for me to take space to describe briefly.

It occurred in an out yard during a time of great scarcity. A hive was in some manner tipped over, off its stand, so that it lay on one side, with the whole top and bottom fully exposed. Two heavy combs of honey were broken. How long it had lain in this position I do not know.

When I arrived, the air near it was black with bees, and thousands were dead on the ground around it. But the robbers, so far as I could determine, had secured but very little of these stores, so gallantly defended, and the colony was far from being whipped or defeated, though no doubt they would have been if the hive had laid in this position long enough. I know that colonies, sometimes quite strong ones, are often cleaned out by robbers, but they are colonies that are not in a normal condition. Usually in such cases they are hopelessly queenless, and make but little effort to resist robbers.

PAPER PACKAGES FOR EXTRACTED HONEY.

There has been a good deal of discussion the last two years or so in regard to the best package for extracted honey. I have read with much interest what has been said in regard to the matter, and I envy those who are able to make a success of using barrels, for I have never been able to get any kind of a barrel that would hold honey in a warm, dry room without leaking. Even when I coated the inside a quarter of an inch thick with wax or paraffine it would soon crack and allow the honey to ooze out between the staves. But my failure in this line was not because the barrels were not dry enough; I have kept both those made from hard and soft wood in a dry, warm room for two years, and then after driving the hoops as tight as could possibly be done, they would soon commence to leak after honey was put in them. I have not only tried different kinds, but a year ago last fall I had three large ones made to order, which were warranted not to leak.

I have, however, made what might be called a success of sacking up extracted honey the same as one would wheat or other grain. Last fall at one time I had about 1000 pounds sacked up. Possibly in the future extracted honey may be shipped in sacks instead of cans or barrels.

The way I came to put honey in sacks was this: The three warranted barrels mentioned, which held about 500 pounds each, got to leaking soon after being filled—two of them badly. I had nothing on hand to put much of the honey into, but I had observed when using the no-drip shipping cases that if a section become broken or marred so the honey ran down on the manilla paper tray in the bottom of the case, this paper seemed to hold it as well as a tin tray would; and I had noticed, at the place where I board, a number of very heavy paper sacks in which flour had been purchased. I found they had a large number of these laid by, the accumulation of years. The paper they were made of was very much heavier and tougher than that used in shipping-cases, but, instead of being glazed or smooth like the latter, it was slightly rough or porous looking. So I took a couple of these sacks and thoroughly coated the insides with beeswax, and filled them with honey. They held it all right, and soon afterwards enough sacks were waxed to hold all the honey the two worst leaking barrels contained.

The honey remained in some of the sacks nearly a month, and no leakage whatever occurred, except with one sack, and this was owing to a defect in the sack.

My method of waxing the inside was to pour a large quantity of melted wax in a sack, then with one hand gather up the mouth of the sack tight, and with the other hand take hold of the bottom at one corner, so as to turn it bottom side up and around in such a way that the wax would reach and coat all parts of the inside. This had to be done quickly, or a good deal of wax would adhere to a sack. It took considerable to wax them, anyway, but after

the honey was taken out, the sacks were cut up and boiled in water, by this means getting all the wax back again.

My success with these large sacks led me later to try small sacks for the retail trade. A good many who come to the house for a few pounds of honey never bring anything to put it in; few of them will buy a pail or jar, and if I lend them a dish to carry it in all of them will readily agree to return it and then never do so. I have many customers in town to whom I carry a few pounds of extracted honey, and in this case I either have to wait for them to empty the dish I carry it in, or else call for it again, when, if there is any one at home, we may perhaps find it has been filled with something else. For instance, last season one lady ordered three pounds; I had nothing smaller than a gallon jar on hand, so I delivered it in that. When I called for the jar, some time afterward, it was full of butter. She said she, of course, supposed the jar went with the honey. My experiments last season lead me to believe that I can reach this class of customers with a package that will go with the honey, for it will cost only about half a cent aside from some work in preparing it, which can be done during the leisure time in winter; a package that will give satisfaction to the customer, and be practically as safe to carry or deliver the honey in as one made of tin.

Southern Minnesota.



The Season of 1901, Suggestions, Etc.

BY A. HOOPER.

AS the American Bee Journal is anxious to have reports from bee-keepers, as well as any suggestions they may be able to make as a result of experience in the management of bees, I send my report of the season, as well as one or two suggestions that may be of use to beginners.

NO HARM IN REPORTING LARGE HONEY CROPS.

My honey crop has been a very good one, but if I tell what it is, down may go the honey market. Pshaw, all rot!

About the close of the season, which has been a fairly good one in this Province, a local reporter of one of the county papers, made some enquiries for use in the weekly report. A statement was given which appeared in the next week's issue, that Mr. So-and-So's honey crop would likely be 9000 pounds from some 90 colonies, spring count. Since the report in the paper appeared, the demand for my honey has been so great that I could sell ten times the quantity I have, and at better prices than I have formerly realized.

Since the said report was given, we have about finished extracting, and find the quantity to be fully 10,000 pounds, and I am pleased to find that most of the colonies have a fair supply for winter, so that very little feeding will have to be done. A considerable number of the colonies, I find, have superseded their queens.

Having all the bees I was able to take care of, or had room for, I discouraged swarming, and have only an increase of about 25 percent. I have not practiced queen-clipping, but, having no help this year, I was unable to keep so close a watch upon them as is necessary when the queen's wings are not clipped, and as a result I lost several swarms. Next season I will try what clipping will do to prevent this.

BUILDING UP WEAK COLONIES.

I notice that several correspondents are troubled to know how to build up weak colonies in the spring, or, in fact, at any time of the year. I have practiced changing positions of the weakest and strongest colonies, with good results. I suggest doing this on a fine day, when the bees are either gathering pollen or honey—say about noon—and if I have a colony becoming very strong, and I do not want increase, then exchange this with the weakest colony in the way suggested, and the chances are that swarming may be averted, and your colonies all averaged up and ready for the honey harvest.

This season I had a very weak late swarm of nice bees, that I wanted to retain, but they were entirely too weak to build up. I changed positions with a strong colony a few days before the honey-flow ceased, with the most satisfactory results—no fighting, nor any disturbance that I could notice.

CROSS BEES—THE "JOUNCING" METHOD.

My bees were unusually cross this year, there being only a day or two at the close of the basswood flow that I could extract without a veil, and mostly had to use gloves in addition to being well protected otherwise.

I tried the "jouncing" method of getting the bees off

the frames, recommended by Mr. Davenport, but while it may work with nearly empty frames, or the shallow Heddon frame, I am satisfied it will not do with any large-sized, well-filled frames.

NO USE FOR BEE-ESCAPES.

I have also tried bee-escapes, but have given them up as practically worthless. I have no time to fool away with them.

The honey-flow exceeding my expectations, I had to defer extracting for want of tins to put it in, and so tried bee-escapes, but, being alone, I found it about as much trouble, and got about as many stings getting the bee-escapes adjusted, as I did in getting out the combs without them. My plan has been to start after noon, give the bees a good smoking, take out the frames quickly, and run them into the extracting room, and stack them up three and four deep, until I had 10 or 12 in; then extract these. In the meantime the bees would get somewhat quieted down in the yard, and I would then get off a few more. Any bees that would go in on the combs would soon find their way to the windows, and go out of the escapes.

The season being unusually dry, the honey is of very fine quality, and sells readily in small quantities at 10 cents. Latterly we have had abundant rains, and the bees are breeding freely, which augurs well for good wintering.

"HIVING TWO SWARMS IN ONE HIVE."

On page 581, Mr. Davenport says he has had no trouble from hiving two swarms together when both issue at or about the same time. In July last, when I had a large swarm nicely hived, but before I could remove it, a large swarm issued, and there being a cluster of bees on the front of this hive, it came down and went in with them. I at once put on a queen-excluder and two cases of sections with mostly drawn comb, to give them room. On the 5th day after, one of the swarms came completely away, and clustered on a limb of the tree exactly where the first swarm had clustered, which led me to believe that it was the first swarm that had left the hive, as the others never clustered at all. The time between the issuing of the two swarms at first was not more than 15 minutes.

My experience thus far leads me to conclude that bees do not do everything by rule, and we may always expect them to do something we never knew them to do before.
Ontario, Canada.

* The Afterthought. *

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B Rural, Toledo, O.

THE TWO-HIVE FEEDING PLAN.

Yes, Mr. Fargo's two-hive feeding seems to offer fine possibilities. But first we must find out whether it will work as a regular thing, or only in exceptional cases. If the open-topped screen-yard we had up a bit ago will work that will be pre-eminently the way to feed. Apparently the two ways will combine kindly. I think that one grand trouble about prolonged feeding in the home hive is that bees declare it annexed, and decide to let it be till needed. Some danger of the same thing in the two-hive method. In the open air a salutary fear that somebody else may get it will keep all but the very laziest pegging away. Page 531.

BLACK COMBS DISCOLORING HONEY.

I agree heartily that black combs will discolor the inclosed honey somewhat; yet I fear that the attempts to soak them clean are entirely impractical. The situation is this: Many layers of dried dirt, separated by many exceedingly thin layers of silk or wax. The best we can do is to keep the whole thing dry. The first soaking removes part of an outer layer, and makes the whole wet and nasty. With each successive soaking more, and always more, dirt keeps coming "from away back." Ram a two-quart can one-fourth full of dirty handkerchiefs (such as are found in a bee-keeper's trouser's pocket at the end of a hot week); fasten them down so they can not be moved about; and how long ere the bottom layer will be cleaned by turning water in and out the top? Page 531.

HIVING TWO SWARMS TOGETHER.

To C. Davenport, page 581, I would say that my experience with voluntarily hiving two swarms together is not large, because I usually avoid it when I can; but they go together in spite of me pretty often; and my troubles with balled queens when swarms are mixed are by no means imaginary. Quite willing to let his many successes have their due weight—and also quite glad to have so sound a veteran to fall back upon as Dr. Gallup, page 532:

"If you have two or more swarms come out at one time and cluster together, or if you have after or second swarms with more queens than one and you wish to separate them, shake them into the clustering box and let them stay for half or three-quarters of an hour, and the bees will ball the surplus queens, and roll down to the lower edge of the box."

I note that Dr. Gallup says, "Sometimes they ball every queen, but not usually." I think that with me balling every queen is rather the rule than the exception, if the swarm is a mixed one. Why this difference? His experience, I think, has been mostly in fat locations, where bees seldom swarm except during honey-flow. My experience has been in a lean



MANUFACTURES AND LIBERAL ARTS BUILDING—PAN-AMERICAN.

location, where bees often swarm in time of dearth. As I see things, bees carrying little or no honey are not sure to be cross to their keeper, but pretty sure to be severe on stranger queens. In a mixed swarm all the queens are stranger queens to thousands of the workers, and if they balled some of them, and did not ball all of them, it would be a curious fact calling for explanation.

Glad to see that Dr. Gallup has had experience in making a colony into an impromptu swarm clustered in a box for the purpose of moving their location a short distance. Have wondered whether that would work. He finds that it does.

HARD TO DESTROY ALL DRONE-BROOD.

I smiled when J. D. Gehring said that he found destroying all drone brood harder than he expected, and that unforeseen things happened. Been there. My dear bee fever child, don't you be too sure you can destroy all drone-brood—not even by the excellent Doolittle plans on opposite page. Page 533.

SHOWING MERCY TOWARD ANIMALS.

Prof. Cook, on page 537, did not pass on from mercy toward animals to mercy toward bees; but there is room for quite a sermon on that point. This paper surely goes to many readers who want to do just right in the little things of life. I have often felt it a difficult problem to decide just when a bee's little life ought to be spared (at appreciable expense of time, which means money), and just when the prompt sacrificing of the little life is the real right thing to do. I have also wondered about the would-be robbers and stingers, how much less claim they have upon our mercy than the more quiet members of the hive. I rather think that the insect door-keeper, doing duty promptly and well, should be a subject of admiration to a reflective and right-minded man—and that the sentence, "He stung me," ought not to be in such large vocal type as it is often put. Per contra, there gets afloat at times a considerable amount of sentimental nonsense and unwisdom, which would fain make us more careful of insect life than the Creator is himself, and which would make apiculture impossible before we got to its logical conclusions.

Our Wood Binder (or Holder) is made to take all the copies of the American Bee Journal for a year. It is sent by mail for 20 cents. Full directions accompany. The Bee Journals can be inserted as soon as they are received, and thus preserved for future reference. Upon receipt of \$1.00 for your Bee Journal subscription a full year in advance, we will mail you a Wood Binder free—if you will mention it.

* The Home Circle. *

Conducted by Prof. A. J. Cook, Claremont, Calif.

OUR VENICE.

Time and money spent in welding all the home influences and attractions and loves and sympathies, are well spent. A year ago I was driven along the "Mountain Boulevard" which leads from Santa Barbara to charming Montecito. This drive of seven or eight miles is one of exceeding beauty, it seems to me of almost incomparable beauty. As we sped along looking now upon the beautiful ocean, now skirting some beetling cliff, now plunging into some bower of green that seemed to block our way, I said over and over, "Oh, that the others of the home were here!" I said, "Before a year goes by, they shall, with me, enjoy this bit of Nature's finest tracery."

The year has been a brighter, happier, better one, as the memory of the charming landscape has given added charm to my life, and as the prospect of all of us of our home circle making that beautiful circuit together has been ever before me, I have been in a sort of perpetual sight-seeing with the dear home loved ones the year through. But the far summit of this pleasurable experience was only reached when last Saturday we all actually enjoyed together that wonderful bit of landscape. It was a red letter day in our family.

Santa Barbara has been called the Venice of America. I have never looked on Italian landscape, but I am sure it suffers no wrong in the figure. While there is not the thrift and wondrous beauty in its entirety that we so much prize and admire in Redlands, yet here one of the finest bays of the world lays its inexpressible charm before us. Many beautiful homes attract us as no other section of California can or does. I have never seen such a wealth of adornment in shrubs, trees and flowers, as this section has to offer. As I come to visit these lovely homes each year—and I never pass them by—I feel that I have a real ownership in them. The graceful cocus palms, the incomparable bamboos, the delicate, exquisite tree-ferns, and countless other vines, shrubs and trees, fill one with delight and admiration.

Montecito, the wonderful suburb, has some of the finest homes and the best adorned residences to be seen any where. As one drives along among the hills, shaded by live-oaks, he is ever and anon coming to a place where wealth, taste and Nature have combined to paint a picture that one loves to hang perpetually on memory's walls. I am glad when wealth gives to us such marvels of beauty as lovely Montecito so proudly exhibits, and I am more glad that Wealth does not keep them to herself, but seems pleased to share them with others of us that else would know them not. Surely, no one will come to California without feasting on the rare, exquisite beauties that make Santa Barbara and its lovely suburb so famous the world over.

TWO FORTUNATE WOMEN

"Ventura by the Sea" is the county-seat of the county by the same name. It is only a few miles from our American Venice. Scarce more than an hour by cars, which connect the two cities along the sea and give one a ride that is never to be forgotten. Here two women live that I am proud to know, proud to honor, proud to introduce to our readers. One of these women is Mrs. Gould, who has produced petunias that have startled the world. The other is Mrs. Shepherd, who has been equally happy in adding to the world's wealth of choice, incomparable begonias. If there is anything in the way of floral loveliness that outvies Mrs. Th. Gould's petunias, it is Mrs. T. B. Shepherd's begonias. If there are flowers and foliage any where that rival Mrs.

Shepherd's begonias, they are in the not distant garden of her neighbor, Mrs. Gould. The whole world is enriched by the fond efforts of these two women. We have rarest, richest beauty that else we should not have known, for they would not have been.

Again, two women have done this beneficent work. We expect new, rich, rare developments from men. We have not usually found our grand women stepping to the front in such realms. We glory all the more when such strides are taken. I wish every home in the land could enjoy Mrs. Shepherd's begonias, and every household know more of God and pleasure because Mrs. Gould's petunias were daily companions. I know of one home that is so blessed, and its inmates are very grateful.

HOME FLOWERS.

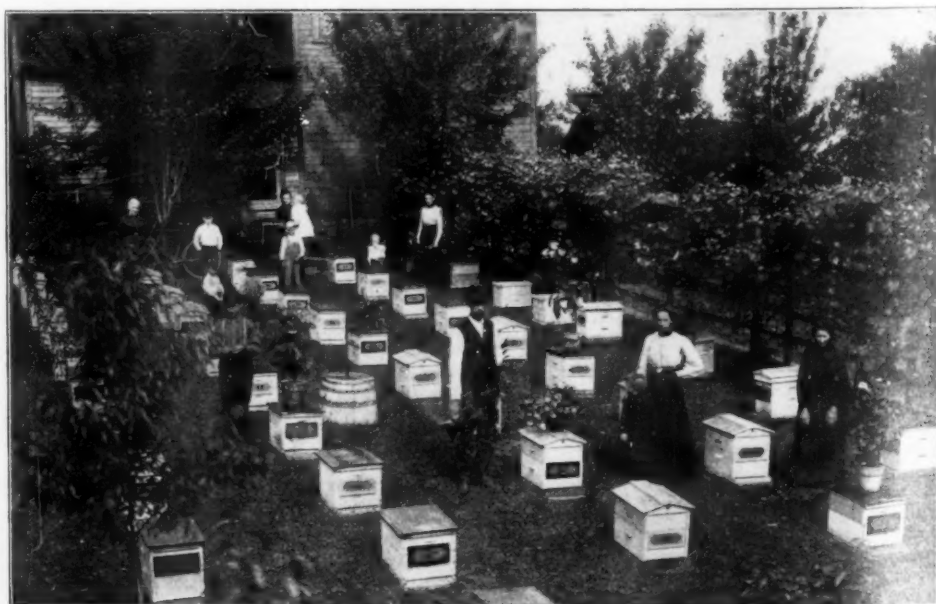
I know of an orange orchard, ten acres, which recently sold for \$12,000. I thought it a great price, and so asked the recent owner how he was so fortunate in his sale. He replied: "My roses and palms did it." His entire place is skirted by great fountains of green in the magnificent Phoenix palms, and alternating with these are most lovely roses, which grow and bloom as only California roses can do. Why can not every home rejoice in such loveliness?

I know that next to wife and the dear children, nothing so wed us to home as the flowers. I heard a lecturer say, a day or two since, that it was his business a few years ago to visit all the homes of a certain region. He said he found the home yard and porch the most certain index to the refinement and courtesy that would greet him in the home. He said he fancied that even the dogs in the flower-decked homes were more kindly in their reception. I believe it. Flowers beget a kindly, genial spirit, and every dog even is quick to feel and sure to be mellowed by such spirit. Were the flowers to be taken from our house, porch and yard, we would all wish to go with them.

THE ANT-LION.

A queer insect! What strong, sharp jaws! What a fierce, daring temper! A very rat-terrier among its kind. A unique home is his. He always dwells in the loose, shining sand. Above him is only space, for he rests at the very bottom of a funnel in the friable earth. His threatening jaws are alone visible; for all else is covered by the sand. Above him the side walls of his funnel are so steep that even the quick, wary ant passes its margin at its peril. Once our eager, daring, fearless ant-lion feels the tell-tale, falling sand, and he knows that another victim has had the temerity to brave the lion in his lair. He at once throws a harsh shower of sand, which surely brings the intruder down to the very jaws of death. No sooner has he the luckless wanderer in his merciless jaws than the latter is shaken as never a rat-terrier shakes his prey, until the poor victim has daylight and life shaken from him.

Thus these ant-lions are our good friends, for they take their often meals of insects that would else feed on our fruit



APIARY OF J. W. TUCKER & SON, OF JEFFERSON CO., PA.—See page 628.

and vegetables. The mature insect—the imago—that comes from these fierce, formidable ant-lions, looks much like a dragon-fly or darning-needle, but is easily told as the latter has very small antennae, which are hardly visible, while those of these insects, though not large or long, are plainly to be seen.

I have just been visiting a sandy tract where these funnel-shaped holes and homes of the ant-lions were very much in evidence. I hope all our boys and girls will hunt them up, and collect the fully grown ones, that they may rear the flies.

Questions and Answers.

Questions on Breeding of Bees.

1. In selecting queen and drone mothers, what is the most important part to look to, to improve the stock?
2. Why do the most of queens produce drones not uniformly marked? And some queens will produce uniformly marked drones. Does it denote impurity with those that do not produce uniform drones?
3. Do you think it best to have the queen mother and the drone mother of no kin? or does it not make any difference if they are closely related?
4. Are the drones pure from a queen that is mismated, but reared from a pure mother? SOUTH CAROLINA.

ANSWERS.—1. In either case the important thing for practical purposes is to have mothers whose worker progeny show good results in the harvests gathered. All the better if of pure-established blood, but in any case the workers should be good honey-gatherers.

2. I don't know why. I hardly think that a difference in the appearance of drones is a sure proof of impurity.

3. Other things being equal, it is decidedly better that there shall be no close relationship. Those who breed for improved strains make some of their greatest triumphs through using closely related blood, because it is easier to find the same characteristics in two animals nearly related; but while it is easier to perpetuate good qualities through close relationship, it is also easier—perhaps I ought to say it is still easier—to perpetuate bad qualities through close relationships. On the whole, I believe it is a pretty safe thing for common bee-keepers like you and me to let close breeding alone.

4. If I should be obliged to answer that question in a single word, I should say yes, and for all practical purposes that is the right answer. But if you draw the matter very fine, it will be said that when a dam has borne an offspring her own blood may to a slight degree be affected by the blood of her offspring, and hence the drone offspring may be slightly affected. Dzierzon, however, always counted that the mating of the queen had no effect upon her male offspring.

Several Queen Questions.

1. I have been working a few colonies of bees for six years. I now have 30 colonies, and this season I have been more perplexed than ever at their actions. In the first place, my text books and papers teach me that with the sealing of the first queen-cell the old queen will issue with a swarm; but I have had several instances this summer where it failed to be true, after watching them for several days, after the cells were sealed, for swarms. I either killed or caged the old queen and destroyed all but one cell. What was the cause of their acting so? Was it a case of intended superseding? If so, how am I to tell which is intended to swarm or supersede?

2. The queen of one of my best colonies disappeared, and they swarmed with a very small virgin queen. My wife caught her, but she got away and the swarm returned to the old hive. This was about 5 o'clock p.m. The next morning I looked through the colony and found a very fine virgin queen, and several capped cells, so I closed the hive and watched for a swarm. The queen kept peeping, off and on, all day, but no swarm issued, and after watching for two days I opened the hive again and found the fine queen gone, and a small one in her place, and cells all destroyed. What was the cause?

3. I had several colonies in normal condition, that sealed queen-cells without anything in them; or, at least, after waiting beyond the required time I opened them and found them empty.

I received a premium queen and tried to follow directions very carefully, but after eating the pasteboard off and part of the candy, they quit and kept clustered very tightly over the cage. After waiting three days I smoked them and turned the queen loose, but they balled her immediately, so I re-caged her and took four frames of hatching brood and set over a strong colony, with a flour-sack between, for several days. I kept her caged with her attendants for a day, then turned her loose, and after two or three days I set the hive on a stand by itself, and opened the entrance; but the next time I opened the hive she was gone. Now, what became of her? She acted like a virgin. NEBRASKA.

ANSWERS.—1. "Bees do nothing invariably," and there are exceptions to all rules. It is impossible to say whether queen-cells are intended for swarming or superseding by the appearance of the cells, but you can generally make a pretty good guess from attendant circumstances. If you find only two or three cells, you are pretty safe in guessing that swarming is not intended. Of course that refers to cells well advanced, for when first begun for swarming there may be only one or two. If 8, 10, or more cells are started, you may feel pretty sure that swarming is in contemplation. The time when cells are found will help you to make a guess. Early in the season, when swarms are issuing every day or so, the presence of queen-cells points pretty strongly toward swarming; when the honey-flow is about over, they point toward superseding.

2. A little hard to say. It is just possible that the small queen you saw last was the fine queen you had previously seen; for sometimes a queen just out of the cell looks quite different in size and color from what she does later. But it may be that the bees concluded not to swarm, and allowed all the queens to emerge, or to be destroyed. The piping of a queen is usually an indication of a forthcoming swarm, but not always. To be a reliable indication of a swarm, there must be the piping of the free queen and the quacking of the young queen or queens still in the cell. A young queen may pipe if no other queen is in or out of a cell in the hive, and a young queen may quack before emerging without the piping of another queen.

3. Are you sure that nothing had been in the cells? It is a common thing for bees to fasten the cap on again after the young queen has emerged, and sometimes they play a practical joke on a worker that happens to be in a cell from which a virgin has emerged, by fastening the worker in the cell.

4. It is possible that in some way the colony had a virgin queen—one might fly into the hive without your knowledge, or a queen-cell may have escaped detection—and so there was an unconquerable hostility to the stranger, which would be in a less favorable condition for acceptance through the journey in the mail and the prolonged imprisonment. Such a queen may look very like a virgin, and then after commencing to lay become as large as she was before mailing. The probability is that the bees killed and dragged her out.

Dividing Colonies in Double Hives.

I have three double colonies. Would you recommend giving the top chambers a queen, and putting it where the bottom chamber is, and putting the bottom one on a new stand? Or what is your plan? INDIANA.

ANSWER.—In this case the supposition is that a colony in two stories is sufficiently strong to be divided. As to the best procedure, conditions must be consulted. The plan you suggest is all right if the upper story is weaker in brood and bees than the lower. In other words, leave on the old stand the weaker of the two stories, giving it the new queen, putting the stronger story with the old queen on the new stand. If the desire be to have the two colonies more nearly equal in strength without considering the honey crop, you might make the division at a time of day when most of the bees were in the hive, and put the stronger half on the new stand with the old queen, fastening the bees in the removed hive for a time, perhaps till the middle of the next forenoon, and carefully guarding against smothering. Of course the new queen must be caged as a newly introduced queen. But it's pretty late in the season to talk about dividing now.

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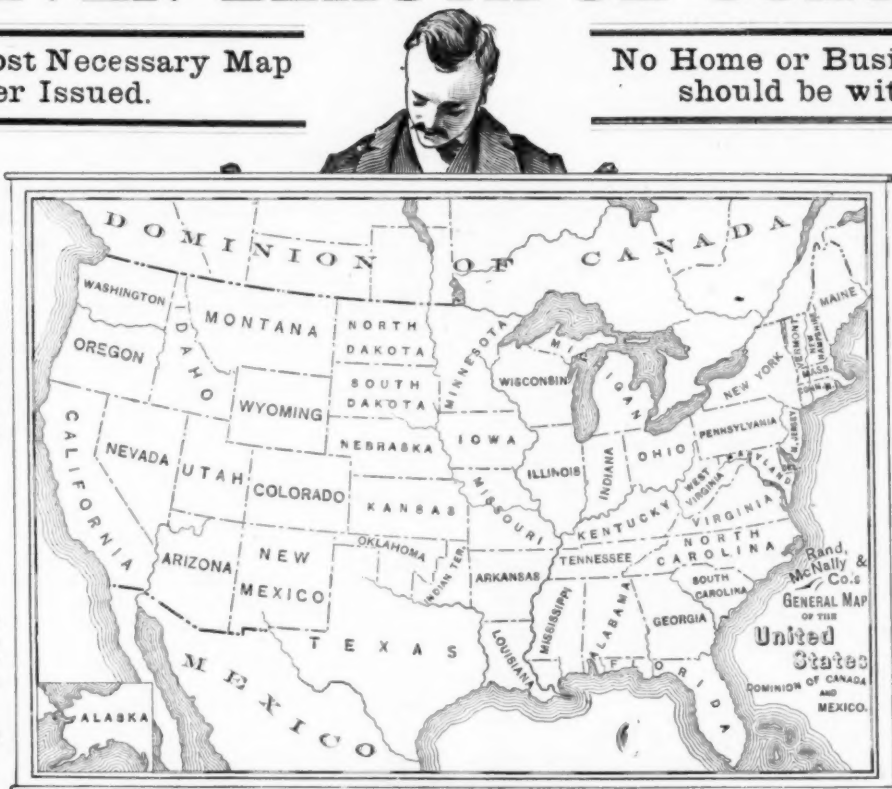


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GENERAL ITEMS

A Good Yield of Honey.

I have a small apiary of 37 colonies. I started with two a few years ago. Some seasons they have done fairly well, and in others producing but a very little comb honey.

This has been the best season that we have had for three years in this section. The two years previous to this there were very light flows of honey, and during this time many bee-keepers lost nearly half of their bees, most of the loss being due to moths; before being noticed the hive would be literally filled with large, white larvæ, that would consume the honey, and even the comb. But, as I said before, this has been a fairly good season in this section, and I have taken from one colony 340 pounds of nice section honey, well filled and capped; besides 10 pounds in sections that were not filled or capped, making a total of 350 pounds. I would like to ask if this is not the best record that you have ever heard of from one colony; although out in California, where the honey-flow is better, and the seasons longer, they may beat this.

JOHN LENNEY.

St. Lawrence Co., N. Y., Sept. 14.

[Yours is certainly a good yield of honey, but we believe Mr. Doolittle once secured 566 pounds of comb honey from one colony in one season.—EDITOR.]

A Hive Roof and Shade.

Bees did well here until about July 1. July and August were so dry that they consumed a great deal more than they gathered during those two months. They gathered scarcely any pollen from the corn, which is generally a great source of pollen.

I will give a description of a roof for a beehive that I am using, and like it very much. Take barrel-staves from any barrel that has become useless for any purpose but kindling. Use one at each end crosswise of the hive to nail the other staves on. Then where the cracks are, nail on another stave. It is light and handy, and will turn the rain as well as the sunshine. Please do not understand that this is a lid or top for a hive, but a roof to turn the water and sun.

HARRY S. HARBOLT.

Clark Co., Ind., Sept. 9.

"Making" Natural Swarms.

In answer to Mr. Hasty's "Not unwise to hold the thing as an experiment until many brethren have had continued success in making all the bees stay" (page 569), here is a little experience I have had in that direction:

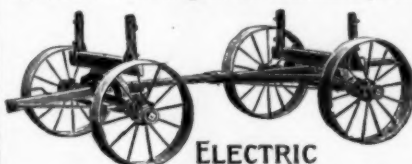
I started last spring with 41 colonies; I hived four swarms, knew of two or three going off, got one out of the rocks, so that I closed the season with 46 colonies; 6 or 8, however, for various reasons, did not do any good, either in honey or brood-rearing, for causes that are now remedied, but at the time I did not know what to do in the several cases. The rest were all very large, strong colonies, 2, 3 and 4 stories full of bees from top to bottom. I saw Mr. Doolittle's article on artificial swarming, in *Gleanings in Bee-Culture*, and I determined to try it on some of my very large colonies, before the main flow was all over, and just about the time I made my last extracting the latter part of July, I began. I found it a most difficult matter, in such large colonies, to find the queen to cage her. In a few instances I made the division without finding the queen, the bees indicating where the queen was; sometimes I saw her in the manipulation, but I found the queen if I could.

The first operation was quite successful; succeeding operations were equally successful, but having to allow the bees to rear their

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own queen, and not wanting to rush along until I could see how it would succeed, I waited to see the success of a previous operation before I tried the next. In this way time slipped by that I know I could have improved.

In these large colonies, after taking out the queen and a big, strong swarm, I had bees enough left for several more, but I waited until they had a new queen in full swing before I attempted another. I thought if this strong remainder could rear a queen for themselves, perhaps a smaller number could, and I could divide faster, so I took out two swarms and left a third on the old stand, taking care that the queenless portion had something to rear a queen from; the colony left on the old stand being left comparatively the weakest, for some might return, and field-bees came in so that this one was soon as strong as any of the others.

Later in the season I was not so successful in taking out more than the queen and one swarm, the queenless portion either going with the queen or back to the old stand; but if I could have had a new queen to have run in with them, I think they would have been all right. Then, as time went by, I found the drones disappearing, and I was afraid the young queens might not be fertilized, and I halted somewhat; some I gave queen-cells.

Recently I found one colony with a good many drones—two frames nearly all drone-cells, and full of eggs, and one frame of worker-comb with just-hatched larvæ, all of which seemed odd to me at this season, though it may be all natural.

I made my last division Sept. 14, putting in a cell about ripe with the queenless portion. In all I found the bees "staid" put, the queen almost invariably going immediately to work, and brood-rearing started off at once, the most trouble being to get new queens in that portion that was queenless. As I said before, I think if I could have had a new queen to have given at the time of the division it would have been better. I lost two of such new colonies, one that had a queen and one that had none, mainly, I think, because I did not give them honey enough at the time of the division. I had plenty of honey in other hives, and ought to have kept closer watch and changed frames so all would have had enough, the main flow being over, and not enough coming in to keep them going.

If I could do it over, with the experience I now have, I could have at least half as many more as I now possess, which is 81. All seem to be doing nicely now. I expect to have to watch closer to see that all have feed, but even in winter in this climate we have days that it is safe to look into the hives.

During the main flow my colonies were big and strong, and gave me about three tons of extracted honey, and at its close I had lots of bees to divide.

A. J. BURNS.
San Diego Co., Calif., Sept. 17.

Once More the Mulberry.

Oh, that wicked brother, Hasty? He, too, must needs consider his cunning little stomach, just like all his horrid men. Hence, his greater faith in mulberry jam. "Ya, I believe me!"

Well, I shall not urge him, or any one else, to accept the views I have stated regarding the honey product from white mulberries. It is the privilege of all to doubt. Indeed, I esteem it a wise provision of Nature that we may feel uncertainties regarding many things if, happily, we are thereby stimulated to investigate and thus lay bare the facts. If what I have written on the subject leads to intelligent efforts to arrive at the exact truth,



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I shall feel abundantly repaid for the expression of my convictions.

Also, let me state that I sowed some of the white mulberry seeds the middle of last month (August), and that at this date (Sept. 20), the plants from those seeds are an inch high, and look vigorous. This is only another way of suggesting that the readers can as readily propagate their plants at a nominal cost for seeds. I hope to have seed to spare next July to give, with my compliments, to all bee-keepers, and to such others as may write for some. Postage is all that will be required.

DR. PERRO,
78 State St., Chicago.

Golden Honey-Plant.

I send a honey-plant which I desire named. There is much of it growing here on the bottom lands, and it is the greatest honey-plant we have in this part of the country. The nectar flows in it for about one month. It grows about 4 to 6 feet high. The honey from it has a yellow cast.

Our bees did no good this year in storing surplus honey.

J. L. BADER,
Coffee Co., Kan., Sept. 20.

[The plant in question is the famous Golden honey-plant—*Actinomeris squarrosa*—and belongs to the great Composite family. It grows tall and branching in rich, loamy soil, and is a boon to the apiarist. Prof. Cook, in the "Bee-Keepers' Guide," page 371, mentions the plant as possessing great attraction for bees. Many other composite flowers are good honey-producers, such as the boneset, asters, goldenrod, etc.—C. L. WALTON.]

Honey-Dew on the Hickory Leaves.

EDITOR YORK:—I send some shellbark hickory leaves for your inspection. They were plucked at 11 o'clock a.m., covered with honey-dew (?). For weeks the hickory leaves have been covered mornings with this stuff, sometimes so thick it would run down and fall in big drops. The bees gather it industriously. Toward noon it dries up considerably, but I have some leaves on my desk that

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I use a PROCESS that produces EVERY ESSENTIAL necessary to make it the BEST and MOST desirable in all respects. My PROCESS and AUTOMATIC MACHINES are my own inventions, which enable me to SELL FOUNDATION and

Work Wax Into Foundation For Cash

at prices that are the lowest. Catalog sent

Full Line of Supplies.

with prices and samples, free on application. BEESWAX WANTED.

GUS. DITTMER, Augusta, Wis.

Please mention Bee Journal when writing.

BEST Extracted Honey For Sale

ALL IN 60-POUND TIN CANS.

Alfalfa Honey

This is the famous White Extracted Honey gathered in the great Alfalfa regions of the Central West. It is a splendid honey, and nearly everybody who cares to eat honey at all can't get enough of the Alfalfa extracted.



Basswood Honey

This is the well-known light-colored honey gathered from the rich, nectar-laden basswood blossoms. It has a stronger flavor than Alfalfa, and is preferred by those who like a distinct flavor in their honey.

Prices of Alfalfa or Basswood Honey:

A sample of either, by mail, 10 cents, to pay for package and postage. By freight—two 60-pound cans of Alfalfa, 8 cents per pound; four or more cans, 7½ cents per pound. Basswood Honey, ½ cent more per pound than Alfalfa prices. Cash must accompany each order. You can order half of each kind of honey, if you so desire. The cans are boxed. This is all

ABSOLUTELY PURE HONEY

The finest of their kinds produced in this country.

Read Dr. Miller's Testimony on Alfalfa Honey:

I've just sampled the honey you sent, and it's prime. Thank you. I feel that I'm something of a heretic, to sell several thousand pounds of honey of my own production and then buy honey of you for my own use. But however loyal one ought to be to the honey of his own region, there's no denying the fact that for use in any kind of hot drink, where one prefers the more wholesome honey to sugar, the very excellent quality of alfalfa honey I have received from you is better suited than the honeys of more marked flavor, according to my taste.

McHenry Co., Ill.

C. C. MILLER.

Order the Above Honey and then Sell It.

We would suggest that those bee-keepers who did not produce enough honey for their home demand this year, just order some of the above, and sell it. And others, who want to earn some money, can get this honey and work up a demand for it almost anywhere.

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.

have lain there till they are dry and brittle—over a week—and there is still honey (?) sticking on them. I have not found it on any other kind of leaves. It seems light in color—about like white clover honey—and perfectly clear. It has been so long since we had any rain that I don't know when it was. Bees have done no good here this season.

C. W. McKOWN.

Knox Co., Ill., Sept. 10.

[The leaves arrived while we were in Buffalo, but on our return the sticky sweetness could still be plainly seen on them. It must have been quite thick on the trees.—EDITOR.]

CONVENTION NOTICES.

Illinois.—The annual meeting of the Northern Illinois Bee-Keepers' Association will be held in the Court House in Rockford, Ill., on Tuesday and Wednesday, Oct. 15 and 16, 1901. All interested in bees are invited to attend.
Rockford, Ill. B. KENNEDY, Sec.

Utah.—There will be a meeting of the Utah Bee-Keepers' Association in the City and County Building, Salt Lake City, Utah, Oct. 5, 1901, at 10 a. m., to which all are cordially invited. Kindly inform other bee keepers and send the addresses of your neighbor bee-keepers. We also desire the address of all county bee-inspectors. A full program in the interest of the industry will be presented. Send in questions. Among other questions it is desired to consider, is a union of interest in the purchase of supplies and the disposing of bee-products at profitable rates. Yours in behalf of the bee-keepers,
E. S. LOVESY, Pres., J. B. FAGG, Sec.,
Salt Lake City. East Mill Creek.

It Brings More Eggs
Get a Dandy Green Bone Cutter and double your egg yield. Our new catalogue tells all about feeding green bone, and the best machine for cutting it.
Sold Direct PRICE, \$5
on 30 days' trial, and up
Straiton Mfg. Co., Box 24, Erie, Pa.

Please mention Bee Journal when writing.

1901—Bee-Keepers' Supplies!

We can furnish you with The A. I. Root Co's goods at wholesale or retail at their prices. We can save you freight, and ship promptly. Market price paid for beeswax. Send for our 1901 catalog.
M. H. HUNT & SON, Bell Branch, Wayne Co., Mich.
Please mention Bee Journal when writing.

FREE FOR A MONTH

If you are interested in Sheep in any way you cannot afford to be without the best Sheep Paper published in the United States.

Wool Markets and Sheep

has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

WOOL MARKETS AND SHEEP, CHICAGO, ILL.

Please mention Bee Journal when writing.

Colorado Alfalfa Fields 1000 colonies of bees wanted on shares, to be placed in yards of 200 in unoccupied territory. 26 years' experience.
39A2t W. E. BRAND, Fort Collins, Colo.
Please mention Bee Journal when writing.

WISCONSIN FARM LANDS.

The best of farm lands can be obtained now in Marinette County, Wisconsin, on the Chicago, Milwaukee & St. Paul Railway, at a low price and on very favorable terms. Wisconsin is noted for its fine crops, excellent markets and healthful climate. Why rent a farm when you can buy one much cheaper than you can rent, and in a few years it will be your own property. For particulars, address, F. A. MILLER, Gen'l Passenger Agent, Chicago, Milwaukee & St. Paul Railway, Chicago.
39A3t

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (white).....	\$.60	\$ 1.00	\$ 2.25	\$ 4.00
Sweet Clover (yellow).....	.90	1.70	4.00	7.50
Alsike Clover90	1.70	3.75	7.00
White Clover	1.00	1.90	4.50	8.50
Alfalfa Clover80	1.40	3.25	6.00

Prices subject to market changes.

Single pound 5 cents more than the 5-pound rate, and 10 cents extra for postage and sack.

Add 25 cents to your order, for cartage, if wanted by freight, or 10 cents per pound if wanted by mail.

GEORGE W. YORK & CO.

144 & 146 Erie Street, CHICAGO, ILL.

Wanted.

Comb and Extracted Honey. Will buy your honey no matter what quantity. Mail sample of extracted, state quality of comb honey and price expected delivered in Cincinnati. I pay promptly on receipt of goods. Refer you to Brighton German bank, this city.
C. H. W. WEBER.

2146-2148 Central Ave., CINCINNATI, OHIO.
40Atf Please mention the Bee Journal.

Wanted To Buy Honey

What have you to offer and at what price?
34Atf ED WILKINSON, Wilton, Wis.
Please mention Bee Journal when writing.

Wanted Fancy White Comb Honey in no-drip cases; also Extracted Honey. State price, delivered. We pay spot cash. FRED W. MUTH & CO., Front & Walnut Sts., Cincinnati, Ohio. Reference—German National Bank, Cincinnati.
40A5t Please mention the Bee Journal.

WRITE US

If you have large or small lots of HONEY to sell.

State quantity, how put up, kind of honey, price expected, and, if possible, mail sample. We pay spot cash.

REFERENCE—Wisconsin National Bank.

E. R. Pahl & Co.

40Atf MILWAUKEE, WIS.
Please mention Bee Journal when writing.

Wanted Comb and Extracted Honey!

State price, kind and quantity.
R. A. BURNETT & CO., 199 S. Water St., CHICAGO
33Atf Please mention the Bee Journal.

Wanted—Honey.

Car Lots or otherwise: will pay highest market price, spot cash. Address, stating quantity, quality, and price desired at your station. Will send man to receive when lot is large enough to justify.
THOS. C. STANLEY & SON,
31Atf FAIRFIELD, ILL.
Please mention Bee Journal when writing.

BEE-SUPPLIES!

ROOT'S GOODS AT ROOT'S PRICES

Everything used by bee-keepers.
POUDER'S HONEY-JARS. Prompt service. Low Freight Rates.
NEW CATALOG FREE.

WALTER S. POUDER.
512 MASS. AVE. INDIANAPOLIS, IND.

Please mention Bee Journal when writing.

HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Sept. 18.—No. 1 white comb honey is selling at 15c per pound, with occasionally a little more being obtained for fancy, that which does not grade No. 1 selling at from 13c@14c, with the light amber at 12c@13c; dark honey of various kinds selling at 10c@11c. Extracted in moderate demand at from 5c@6c for the various grades of white; some fancy white clover and basswood bringing 7c; light amber ranging from 5c@5c; dark at 5c@5c. Beeswax firm at 28c@30c.
R. A. BURNETT & CO.

CINCINNATI, Aug. 10.—The honey market is rather dull on account of the warm weather. Extracted sells only to manufacturers from 5c@6c; better grades alfalfa water-white from 6c@7c; white clover from 8c@9c. Fancy white comb honey sells from 13c@15c.
C. H. W. WEBER.

BOSTON, Sept. 27.—We quote our market as follows: Fancy white in cartons, 16c; A No. 1, 15c; No. 1, 14c. Extracted, white, 8c; light amber, 8c; amber, 6c@7c.
BLAKE, SCOTT & LEE.

ALBANY, N. Y., Sept. 19.—We quote: Fancy white comb, 16c; No. 1, 15c; mixed, 13c@14c; No. 1 buckwheat or amber, 12c@13c. Extracted, white, 7c@7c; light, 6c@7c; dark, 5c@6c. Beeswax, 28c@29c.
H. R. WRIGHT.

OMAHA, Aug. 8.—New comb honey is arriving by express in small quantities from Iowa and Colorado, and selling at \$3.50 per case in a retail way. California extracted honey is being offered carlots at 4c@4c per pound, f.o.b. California shipping-points, but we have not heard of any sales having been made thus far. The production of extracted honey seems to be quite large this year in Colorado, Utah and California.
PEYCKE BROS.

NEW YORK, Sept. 10.—Comb honey is now beginning to arrive in large quantities, and, as a rule, quality is fine. The demand is good, and we quote as follows: Fancy white, 14c@15c; No. 1, 13c; No. 2, 12c; and amber, 11c. No buckwheat is on the market as yet, but are expecting same within a week or so. Extracted is selling slowly, with plenty of supply, at 5c@6c, according to quality, and Southern in barrels at from 55c@65c per gallon. Beeswax dull at 27c.
HILDRETH & SEGELKEN.

DES MOINES, Aug. 7.—There is very little doing here in new crop of honey. Some small lots of near-by produced comb honey are on the market and selling in a retail way at \$3.50 to \$3.75 per case. We do not look for much trade in this line before Sept. 1. Our market does not consume a great deal of extracted honey.
PEYCKE BROS. & CHANEY.

DETROIT, Aug. 12.—Fancy white comb honey, 14c@15c; No. 1, 13c@14c; no dark to quote. Extracted, white, 6c@7c. Beeswax, 25c@26c.
M. H. HUNT & SON.

BUFFALO, Aug. 10.—Quite a good demand for fancy honey, 16c@17c, and lower grades, 12c@14c; old neglected. Advise moderate shipments only of new as yet.
BATTERSON & CO.

SAN FRANCISCO, Sept. 4.—White comb, 10c@12 cents; amber, 7c@9c; dark, 6c@7c cents. Extracted, white, 5c@—; light amber, 4c@—; amber, 4c@—. Beeswax, 26c@28c.

Arrivals and spot offerings are of rather moderate volume, but there is as much or more on market than can be conveniently or advantageously placed. To secure liberal wholesale custom, prices would have to be shaded in favor of buyers. In a small way for especially desirable lots slightly higher figures than are quoted are realized.

KANSAS CITY, Sept. 14.—Up to the present time only small lots of new comb honey have been on the market, and these met with ready sale on the basis of 15c@16c per pound for fancy white. For next week heavier receipts are expected and quotations are issued at \$3.10@3.25 per case for large lots, which would be equal to about 14c@14c; the demand being quite brisk, a firm market is anticipated. Inquiries for extracted are a little more numerous, but large buyers still seem to have their ideas too low. In a small way 5c@6c is quotable.
PEYCKE BROS.

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We have a Large Stock on hand
and can ship promptly.

SEND US YOUR ORDERS FOR
Hives, Extractors

OR ANYTHING YOU WANT IN THE
BEE-KEEPING LINE.

WE MAKE ONLY THE BEST.

Our Falcon Sections and New Process Founda-
tion are ahead of everything, and cost no more
than other makes. New Catalog and copy of
THE AMERICAN BEE-KEEPER free. Address,

THE W. T. FALGONER MFG. CO.,
JAMESTOWN, N. Y.

W. M. GERRISH, East Nottingham, N. H.,
carries a full line of our goods at catalog prices.
Order of him and save freight.

Please mention Bee Journal when writing.

River Forest Apiaries!

FILL ALL ORDERS

By Return Mail.

Italian Queens Warranted

Untested, 75 cts.; Tested, \$1.00: Select Tested,
\$1.50. Half dozen or larger lots as may be
agreed on. Address,

RIVER FOREST APIARIES,
RIVER FOREST, Oak Park Post-Office,
30Atf Cook Co., ILL.

Please mention Bee Journal when writing.

The Emerson Binder

This Emerson stiff-board Binder with cloth
back for the American Bee Journal we mail for
but 60 cents; or we will send it with the Bee
Journal for one year—both for only \$1.40. It is
a fine thing to preserve the copies of the Jour-
nal as fast as they are received. If you have
this "Emerson" no further binding is neces-
sary.

GEORGE W. YORK & CO.,
144 & 146 Erie Street, CHICAGO, ILL.

If You Want Hybrid Bees or Queens
for strengthening up
weak or queenless colonies, I will send one colony
with queen for \$1.00; two or more, 75c each;
Queens, 25c each. **H. H. PORTER,**
39A2t R. R. No. 1, BARABOO, WIS.

QUEENS! QUEENS!

From honey-gathering stock. Tested, \$1.00; un-
tested, 75 cents. "SHADY NOOK APIARY."
JAMES WARREN SHERMAN,
29A13t SAG HARBOR, NEW YORK.

Standard Belgian Hare Book!

BY M. D. CAPPS.



THIS book of 175
pages presents a
clear and concise
treatment of the Bel-
gian Hare industry;
its growth, origin
and kinds; the san-
itation and construc-
tion of the rabbitry;
selection of breeding
stock; care of the
young, feeding, dis-
eases and their
cures, scoring, mar-
keting, shipping, &c.
First edition of 50,
000 copies was sold
in advance of publi-
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paid; or with the American Bee Journal one
year—both for only \$1.10.

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24th Year **Dadant's Foundation.** 24th Year

**We guarantee
satisfaction.** **

What more can anybody do? **BEAUTY,
PURITY, FIRMNESS, No SAGGING, No
LOSS.**
PATENT WEED-PROCESS SHEETING.

**Why does it sell
so well?** **

Because it has always given better satis-
faction than any other.
Because in 23 years there have not been any
complaints, but thousands of compli-
ments.

Send name for our Catalog, Samples of Foundation and Veil Material.
We sell the best Veils, cotton or silk.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

Very fine pure-bred **BARRED PLYMOUTH ROCK** Chickens and Eggs
for sale at very low prices.

Langstroth on the Honey-Bee—Revised,
The classic in Bee-Culture—Price, \$1.25, by mail.

Beeswax wanted at all times.

CHAS. DADANT & SON, Hamilton, Hancock Co., Ill.

Please mention Bee Journal when writing.

RED CLOVER QUEENS

BLACK ROCK, N. Y., Sept. 3, 1901.

FRIEND ERNEST:—I will try and tell you what you want to know about that queen. I got
her of you in 1899 as a premium with GLEANINGS. I never saw a small colony of bees build up
as that one did. In the spring of 1900 they came out in fine shape, wintered perfect. I raised them
up in May and gave them 8 frames more so the queen would not want for room. I never saw such
a colony of bees as they were in June, and they were actually storing honey when other bees in
my yard were starving. No! they were not robbing. I never saw those two best colonies of mine
trying to rob. **THEY CERTAINLY WORK ON RED CLOVER.** This is no guesswork, as I
have seen them. As you know, the past two seasons have been very poor, and what honey my
bees did get in 1900 candied soon after cold weather set in. I packed this colony in a chaff hive
and left them out, thinking that such a strong colony would winter perfect. The snow came on
the middle of November, and those poor bees never a fly until the last of March or the first of
April. When warm weather at last came I thought they were dead, as they did not seem to be fly-
ing much, so I did not pay any attention to them until in June. I noticed they were working a
little, so I opened up the hive and found them in the upper story. I took the lower story out and
left them in the one body. The queen was laying nicely, and I thought they would make a good
colony to winter. Along the last of July I noticed that they needed more room. I gave them a
super, 24 boxes, and in a few days they had it full. They have made 72 boxes of as nice honey as
you ever saw, and are drawing out some starters now, Sept. 2.

Very truly yours,

GEO. B. HOWE.

Prices of Red Clover Queens.

Gleanings in Bee-Culture 1 year and Untested Queen	\$2.00
" " " Tested Queen	4.00
" " " Select Tested Queen	6.00

If you want something good you can not do better than to order one of these queens. All or-
ders are filled promptly. No extra postage on these to foreign countries.

THE A. I. ROOT CO., Medina, Ohio.
(U. S. A.)



GEORGE W. YORK & CO. 144 & 146 Erie Street,
CHICAGO ILL.,
are headquarters for ROOT'S BEE-KEEPERS' SUPPLIES IN CHICAGO
Send to them for their free Catalog.